

ACC NR: AT6036413

by a decrease in hardness, while the decomposition of the β -phase leads to an increase in the hardness of the alloy and hence the pattern of variation in hardness with isothermal treatment is an indirect criterion of the phase composition of alloys of this kind. Orig. art. has: 12 figures, 1 table.

SUB CODE: ~~11~~, 11, 20/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 006

Card 3/3

LITVINOV, V.A., inzhener.

~~Reinforced concrete girder walls.~~ Reinforced concrete girder walls. Izobr. v SSSR 1 no.6:21 D '56.
(Reinforced concrete) (MLRA 10:4)

LITVINOV, V.A., inzhener.

New type precast thin-walled hollow concrete foundation element.
Nov.tekh. i pered. op. v stroi. 18 no.7:15-16 J1 '56.(MIRA 9:9)
(Foundations)

L 32668-66 EWT(m)/EWP(w)/EWP(k)/T/EWP(t)/ETI IJP(c) JD/GD/JR
ACC NR: AT6016407 (A) SOURCE CODE: UR/0000/65/000/000/0028/0036

41
B+1

AUTHORS: Livanov, V. A.; Pil'vinskiy, A. I.

ORG: none

TITLE: Influence of pressure on the properties of cast aluminum alloy D16 / 8

SOURCE: AN SSSR. Institut metallurgii. Metallovedeniye legkikh splavov (Metallography of light alloys). Moscow, Izd-vo Nauka, 1965, 28-36

TOPIC TAGS: aluminum, aluminum alloy / D16 aluminum alloy

ABSTRACT: The effect of pressure of up to 100 kg/mm² applied at 520--550C on the mechanical properties of cast aluminum alloy D16 was investigated. The microstructure strength limit and percentage elongation of the specimens were determined as a function of the applied pressure and temperature (see Fig. 1). It was found that application of pressure to the alloy enhanced its mechanical properties. The enhancement was less pronounced if the specimens were subjected to prolonged homogenization treatment. The effect of pressure on the mechanical properties was more pronounced for those alloys which showed the presence of a liquid phase during compression.

Card 1/2

L 32668-66

ACC NR: AT6016407

0

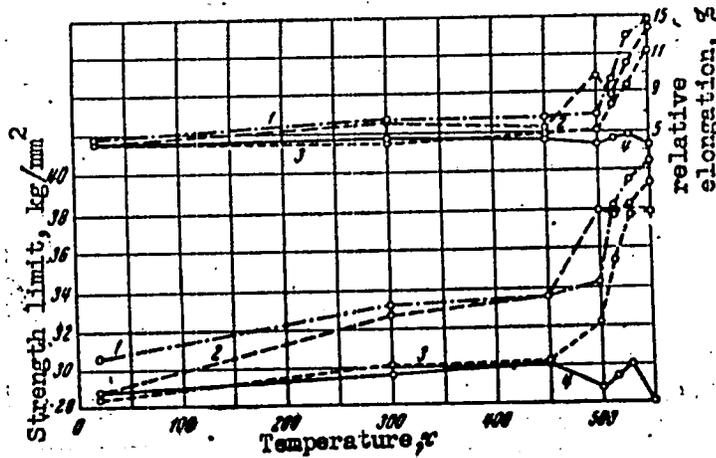


Fig. 1. Mechanical properties of annealed cast alloy D16 as a function of temperature during compression with various pressures.

Pressure, kg/mm²: 1 - 100; 2 - 50; 3 - 10; 4 - no pressure.

Orig. art. has: 4 tables and 8 figures.

SUB CODE: 11/ SUBM DATE: 16Sep65/ ORIG REF: 004

Card 2/2 BLG

ACC NR: AP6033940

SOURCE CODE: UR/0280/66/000/004/0102/0106

AUTHOR: Litvinov, V. A. (Kiev); Savchenko, Yu. G. (Kiev)

ORG: none

TITLE: Multiaperture transfluxor as a restoring element in redundant automata

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 4, 1966, 102-106

TOPIC TAGS: magnetic circuit, system reliability, transfluxor

ABSTRACT: The function of the restoring element is to sense a failure or a serious drop in the performance of critical components in the machine and to switch the function to the alternate (redundant) components. Hence, the success of redundancy design depends largely on a prudent choice of restoring elements, which must satisfy the following requirements: 1) the restoring elements must be highly reliable, since the failure-free operation of the machine hinges largely on their functioning; 2) the restoring elements should not require special circuitry for use in the automatic system; 3) the response of all restoring elements in one system must be at least one order of magnitude faster than the response of the other elements in the machine; and 4) the information stored in a restoring element must be preserved when the power is turned off. These requirements are particularly well satisfied by multiaperture transfluxors of the type shown in Fig. 1. The function of these devices can be explained with reference to

Card 1/3

ACC NR: AP6033940

a simple two-aperture transfluxor shown in Fig. 2. W_1 and W_2 are identical but oppos-

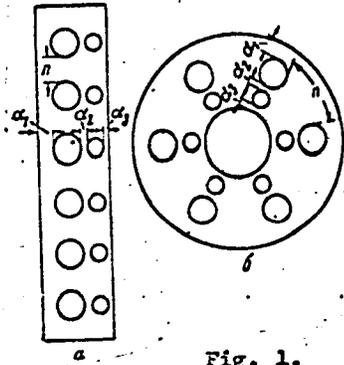


Fig. 1.

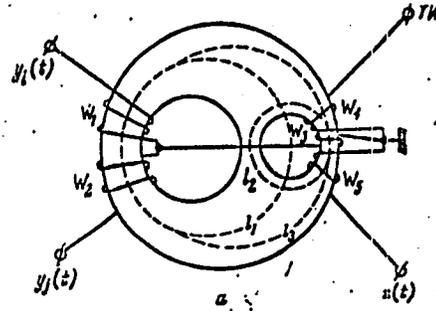


Fig. 2.

ing windings, such that identical signals $y_i(t)$ and $y_j(t)$ generate equal but opposite fluxes, that cancel each other; W_3 is a coupling winding, W_4 is the clock input winding, and W_5 is the output winding. If $y_i(t) = y_j(t) = 1$, the next incoming clock

Card 2/3

ACC NR: AP6033940

pulse will cause an output $z(t) = 1$. Input combinations 01 or 10 generate no output due to the next clock pulse, i. e., $z(t) = 0$. Any subsequent input combination (00, 01, 10, or 11) produces no output. The author provides design data for the transfluxors, as well as their equivalent circuits. This information is also applicable to the multiaperture transfluxors. Orig. art. has: 3 figures, 6 formulas.

SUB CODE: 09/

SUBM DATE: 29Jun65/

ORIG REF: 003/

OTH REF: 001

Card 3/3

ANDREYEV, I.A., prof.; GLUSKIN, L.Ya., kand.tekhn.nauk; ~~LITVINOV, V.D., inzh.;~~
KOVACHICH, V.A., inzh.; FRUMKIN, I.A., inzh.; MOSHCHUK, Ya.I., inzh.;;
DOLBILKIN, V.I., inzh.; ROMANOV, P.A., inzh.; BOYKO, A.B.

Using furnaces with basic high-refractory arches to improve the quality
of chromium steel. Stal' 20 no.10:896-898 0 '60. (MIRA 13:9)

1. Tsentral'nyy nauchno-issledovatel'skiy institut i Izhorskiy zavod.
(Chromium steel--Metallurgy) (Open-hearth furnaces)

LITVINOV, V. D.

LITVINOV, V. D.

Pozharno-prikladnoi sport. Posobie dlia nachal'stvuiushchego sostava pozharnoi okhrany. Moskva, Izd-vo Ministerstva kommunal'nogo khoziaistva, 1953. 156 p., illus., tables, diags.
Title tr.: Applied fire-fighting sport.

TR9151.L54

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

LITVINOV, V. F.

GRABCHENKO, I.M., professor (Vinnitsa, ul. Lenina, d. 60, kv. 8); LITVINOV,
V.F.; KHELEVSKIY, M.V.

Treating gastric and duodenal ulcers complicated by profuse
hemorrhage. Nov.khir.arkh. no.2:26-28 Mr-Apr '57. (MLRA 10:8)

1. Kafedra fakul'tetskoy khirurgii (zav. - prof. I.M.Grabchenko)
Vinnitskogo meditsinskogo instituta
(PEPTIC ULCER) (HEMORRHAGE)

LETVINOV, V.F.

Two cases of cardiac surgery. Nov.khir.arkh. no.6:81 H-D '57.
(MIRA 11:3)

1. Khirurgicheskaya klinika Vinnitskogo meditsinskogo instituta.
(HEART--SURGERY)

BAJASHOV, A.A., inzh.; LIVANOV, V.F., inzh.

Large-panel cellular-concrete houses of the 1-468 series. Transp.
strof. 10 no.9:23-25 S '60. (MIRA 13:9)
(Lightweight concrete) (Apartment houses)

LITVINOV, V.F., assistant; SHAFRANSKIY, L.L.

Case of surgical treatment of aneurysm of the internal carotid
artery. Vest.khir. no.1:138-140 '62. (MIRA 15:1)

1. Iz gos'pital'noy khirurgicheskoy kliniki (zav. - prof. M.V.
Danilenko) Vinnitskogo meditsinskogo instituta (dir. - dotsent
S.I. Korkhov).

(CAROTID ARTERY—SURGERY) (ANEURYSMS)

1. SMALL SERIALS

a) *Специализация исследований в области биологии*

и в области астрономии

- 121. *Бюллетень Академии Наук СССР. Труды в области астрономии, 1943.*
 серия: Труды Академии Наук СССР. 119 с.
 3 авг. 1943, 20 лл.
- 122. *Космические Науки и Исследования. Труды Института Космоса Академии Наук СССР. 1943, 20 лл.*
 серия: Труды Института Космоса Академии Наук СССР. 1943, 20 лл.
- 123. *Космические Науки и Исследования. Труды Института Космоса Академии Наук СССР. 1943, 20 лл.*
 серия: Труды Института Космоса Академии Наук СССР. 1943, 20 лл.
- 124. *Космические Науки и Исследования. Труды Института Космоса Академии Наук СССР. 1943, 20 лл.*
 серия: Труды Института Космоса Академии Наук СССР. 1943, 20 лл.
- 125. *Космические Науки и Исследования. Труды Института Космоса Академии Наук СССР. 1943, 20 лл.*
 серия: Труды Института Космоса Академии Наук СССР. 1943, 20 лл.
- 126. *Космические Науки и Исследования. Труды Института Космоса Академии Наук СССР. 1943, 20 лл.*
 серия: Труды Института Космоса Академии Наук СССР. 1943, 20 лл.
- 127. *Космические Науки и Исследования. Труды Института Космоса Академии Наук СССР. 1943, 20 лл.*
 серия: Труды Института Космоса Академии Наук СССР. 1943, 20 лл.
- 128. *Космические Науки и Исследования. Труды Института Космоса Академии Наук СССР. 1943, 20 лл.*
 серия: Труды Института Космоса Академии Наук СССР. 1943, 20 лл.
- 129. *Космические Науки и Исследования. Труды Института Космоса Академии Наук СССР. 1943, 20 лл.*
 серия: Труды Института Космоса Академии Наук СССР. 1943, 20 лл.
- 130. *Космические Науки и Исследования. Труды Института Космоса Академии Наук СССР. 1943, 20 лл.*
 серия: Труды Института Космоса Академии Наук СССР. 1943, 20 лл.

Specialization for degree of
Doctor of Physical-Mathematical Sciences

Def. at
Tbilisi State U.

Специализация по степени доктора физико-математических наук

LITVINOV V.F.

LITVINOV, V. F.

"Measurements of the density of light ions and condensation nuclei in the atmosphere at Alma-Ata during the total solar eclipse of 21 Sep 1941," Astron. Zhur., 19, No. 4, 1942.

■ Report U-1518, 23 Oct 1951.

USSR/Medicine - Purification of Air

Oct 51

"Electrical Filter for Obtaining Samples of Atmospheric Dust," Prof V. F. Litvinov, Docent N. N. Litvinova, M. M. Dabakh'yan

"Gig i San" No 10, pp 22-26

Although at the Inst of Communal Hygiene, Acad Med Sci USSR, the Inst Imaei Krisman, etc., considerable work had been done on the perfection of methods for the study of atm dust, a satisfactory app for obtaining samples of dust for gravimetric detn and all types of microscopic and chem analysis was not available as yet. The need

199792

USSR/Medicine - Purification of Air
(Contd).

Oct 51

for a device of this type was satisfied by development of a portable electrostatic (Cottrell pptn) device at the Chair of Gen Phys, Rostov-on-Don State U. Tests carried out at the Inst Imaei Sechenov (Yalta), Phys Math Faculty of Rostov-on-Don State U, showed that even hundredths of a mg of dust in 1 cu m of air can be detd accurately with the new device.

199792

LITVINOV, V. F.

LITVINOV, V. F.

AID P - 2887

Subject : USSR/Medicine
Card 1/1 Pub. 37 - 4/20
Authors : Litvinov, V. F., Prof., Litvinova, N. N., Dotsent
Title : ~~Electric filter for obtaining samples of atmospheric dust~~
Periodical : Gig. i san., 9, 16-18, S 1955
Abstract : Discusses the improved 1953 design of an electric filter as compared to the 1951 model described in this journal, 1951, no. 10. The 1953 portable electric filters were constructed by the authors and others in the experimental laboratories of Rostov University. 3 illus., 3 refs.
Institution : Chair of General Physics, Rostov University
Submitted : N 23, 1954

LITVINOV, V. F.

1094. ELECTROFILTER FOR COLLECTING ATMOSPHERIC DUST SAMPLES.
Litvinov, V. F. and Litvinov, N. N. (Gigiena Sanit. (Hyg. & Sanit., Moscow, 2

1956, (9), 16-18). Describes a modification of the electrofilter (see *Gigiena Sanit.*, 1951, (10): 22-25). The dust particles are collected by electro-precipitation, a vacuum tube being used to produce a corona discharge. Potentials of 6 - 8 kv (corresponding to currents of 1 - 2 mA) are obtained. A portable model working on dry cells is given. The instrument is suitable for sampling atmospheres containing not more than 50 - 50 mg/cu.m. S.M.R.

DANILENKO, M.V. (g. Vinnitsa, ul. Gogolya, d.1, kv.16); LITVINOV, V.F.

Late results of mitral commissurotomy. Grud. khir. 6 no.6:27-32
H-D '64. (MIRA 18:7)

1. Kafedra gospiatal'noy khirurgii (zav. - prof. M.V. Danilenko)
Vinnitskogo meditsinskogo instituta imeni N.I. Pirogova.

LITVINOV, V.G.

Excavator for working in ground consisting mainly of rock.

Gov. zhur. no.2475 P '65.

(MIRA 18:4)

KVYATKOVSKIY, V.M., kand.tekhn.nauk; BAULINA, A.I., inzh.;
FOCHKOV, L.S., inzh.; LITVINOV, V.G., inzh.;
LOSEV, A.S., inzh.

Studying the hot liming process in water enriched with
magnesium compounds. Teploenergetika 7 no.10:47-52 0 '60.
(MIRA 14:9)

1. Vsesoyuznyy teplotekhnicheskiy institut i Donbasenergo.
(Feed water purification)

LITVINOV, V. G.[Lytvynov, V. H.] (Kiyev)

Problem of the flow of polymer melts in circular channels,
Prykl. mekh. 9 no.3:322-328 '63. (MIRA 16:4)

1. Institut mekhaniki AN Ukr-SSR.

(Thermoplastics)

LITVINOV, V.G. [Lytvynov, V.H.] (Kiyov)

Flow of thermoplastic melts in a cylindrical pipe. Prykh.mekh.
9 no.5:552-560 '63. (MIRA 16:10)

1. Institut mekhaniki AN Ukr-SSR.

LITVINOV, V.G. [Lytvynov, V.H.] (Kiyev)

Temperature field in a polymer melt flowing in a circular pipe.
Prykl. mekh. 10 no.2:190-197 '64 (MIRA 17:7)

1. Institut mekhaniki AN Ukr.SSR.

BOZOROVICH, Ye.A.; LITVINOV, V.I.

Physiological, biochemical, and clinical changes in patients with diseases of the gastrointestinal tract during the administration of colimycin. Antibiotiki 5 no.3:102-104 Ny-Je '60.

(MIRA 14:6)

1. Laboratoriya po klinicheskoy aprobatsii novykh antibiotikov (zav. - deystvitel'nyy chlen AMN SSSR prof. I.G.Rufanov), khirurgicheskoye otdeleniye bol'nitsy No.56.

(ANTIBIOTICS)

(ALIMENTARY CANAL DISEASES)

OKUN', YEvsey L'vovich; ZIZEMSKIY, Ye.I., retsenzent; LITVINOV, V.I.,
retsenzent; NIKITINA, M.I., red.; DVORETSKIY, L.G., nauchnyy red.;
KRYAKOVA, D.M., tekhn.red.

[Calculation and design of radio transmitters] Raschet i pro-
ektirovanie radiopredatchikov. Leningrad, Sudpromgiz, 1962.
414 p. (MIRA 15:11)

(Radio--Transmitters and transmission)

LITVINOV, V.I.; SHUL'MAN, G.S.

Effect of the material of which a ship hull and its superstructures
are made on the resistance to the loss of ship antennas. Inform. sbor.
TSNIIMF no.85 Sudovozh, i sviaz' no.22:68-72 '63. (MIRA 17:3)

LITVINOVA, M.K., assistant; LITVINOV, V.I., agronom

Effect of seed disinfection on the yield of carrots.

Zashch. rast. ot vred. i bol. 9 no.2:22-23 '64.

(MIRA 17:6)

1. Kafedra ovoshchevodstva Plodoovoshchnogo instituta im.
Michurina, Tambovskaya obl. (for Litvinova).

LITVINOV, V.I.

Basic principles in the organization of a wireless telephone
communication system in the merchant marine. Inform. sbor.
TSNIIMF no. 120. Sudovozh. i sviaz' no. 27:73-81 '64
(MIRA 19:1)

LITVINOV, V. L.

LITVINOV, V. L. : "Investigation of the spectral composition of anisotropic light diffusion in liquids and solutions, and determination of the anisotropy relaxation time". Leningrad, 1955. Leningrad Order of Lenin State U imeni A. A. Zhdanov. (Dissertations for the Degree of Candidate of Physicomathematical Sciences)

SO: Knizhnaya letopis', No. 52, 24 December 1955. Moscow.

LITVINOV, V. L.

Investigation of the broadening of lines of anisotropic dispersion of light in liquids and the determination of relaxation times. M. P. Vuks and V. L. Litvinov (A. A. Zhdanov State Univ., Leningrad). *Doklady Akad. Nauk S.S.S.R.* 105, 696-9 (1965). —Based on Leontovich's quant. theory (C.A. 36, 4416) of the anisotropic dispersion of light in liquids, the following values are given for the exptl. detn. of 7 org. liquids that show anomalous dispersion at the 5 temps. 20°, 60°, 100°, 150°, and 200°. The 7 liquids and their relaxation times expressed as $\tau \times 10^{11}$ sec., are: CS₂ (3.0-0.9); benzene (1.0-0.8); chlorobenzene (6.2-2.2); bromobenzene (7.4-1.2); benzophenone (96-4.5); nitrobenzene (110-8.5); anisole (210-12). I.e. 10⁻¹¹-10⁻¹¹ sec. for the first 4 liquids (the values in parentheses are the max. and min. at the 5 temps. stated above). The values given above for chlorobenzene and bromobenzene agree satisfactorily with the values given by Hennelly, et al, (C.A. 43, 4912c).

Handwritten notes: τ_{max} τ_{min}

2

9
0
0
0

Handwritten initials: RAN
PM
MM

LITVINOV, V. L. and VUKS, M. F.

"Rotary Mobility of Molecules in Liquids and Solutions, and Determination of the Time of Reorientation", a paper presented at the second conference on the Liquid State of Matter, Kiev, 30 May to 3 June 1955, Usp. Fiz. Nauk, April 1955

ATAKHODZHAYEV, A.K.; VUES, M.F.; LITVINOV, V.L.

Two methods for the determination of the oriented relaxation time
of molecules. Fiz. sbor. no.3:118-120 '57. (MIRA 11:8)

1. Leningradskiy ordena Lenina gosudarstvennyy universitet im. A.A.
Zhdanova.

(Light--Scattering) (Spectrum, Molecular)

LITVINOV, V.L.

LITVINOV, V.L.

Orientational relaxation times for some liquid aromatic substances
[with summary in English]. Vest. IOU 12 no.22:19-24 '57. (MIRA 11:2)
(Aromatic compounds)

LITVINOV, V. L.

AUTHOR: Litvinov, V. L. 54-4-4/20

TITLE: Orientational Relaxation Times of Some Liquid Aromatic Compounds (Vremena oriyentatsionnoy relaksatsii dlya nekotorykh zhidkikh aromaticheskikh veshchestv).

PERIODICAL: Vestnik Leningradskogo Universiteta Seriya Fiziki i Khimii, 1957, Vol. 22, Nr 4, pp. 19-24 (USSR)

ABSTRACT: Anisotropic relaxation times of α -picoline and α -chloro-naphtalene at 25°C, of benzonitrile, quinoline, and naphtalene at room temperature up to 200°C and of pyrocatechol at 125°C have been determined. The measurements of the broadening of the scattered line have been performed according to a method developed by M. F. Fuks and A. K. Atakhodzhayev. The results were compared with bibliographical data concerning dielectric relaxation times. There are 1 figure, 3 tables, and 9 references, 4 of which are Slavic.

SUBMITTED: July 12, 1957

AVAILABLE: Library of Congress

Card 1/1

BEZVERKHNIY, M.P.; LITVINOV, V.L.

Sivachukan and Arkiya graphite deposits (eastern Transbaikalia).
Mat. po geol. i pol. iskop. Chit. obl. no.1:108-115 '63.
(MIRA 17:6)

LITVINOV, V.L.; SOLOMIN, Yu.S.

Increased jointing zones in the eastern part of eastern Transbaikalia and their role in the distribution of postmagmatic mineralization. Izv. vys. ucheb. zav.; geol. i razv. 7 no.2:83-92 F'64. (MIRA 17:2)

1. L'vovskiy gosudarstvennyy universitet im. Iv. Franko.

LITVINOV, V.M.; VOTLOKHIN, B.Z.

Measurement of drilling-pump piston frictional forces.
Mash. i nef't'. obor. no.1:17-19 '63. (MIRA 17:1)

1. Groznenskiy nauchno-issledovatel'skiy nef'tyanoy institut.

LITVINOV, V.M.; YERUKHIMOVICH, L.R.; NIKOLAYEV, K.I.

Bench for testing the parts of drilling pumps. Mash. # neft. obr.
no.8:21-23 '64. (MIRA 17:11)

1. Groznenskiy neftyanoy nauchno-issledovatel'skiy inatitut.

POZHARNOV, G.M.; SERDIY, A.G.; LITVINOV, V.M.

Tests of elastic pump packing at high pressure. Mash. i neft.
obor. no.6:9-11 '65. (MIRA 18:7)

1. Moskovskiy ordena Trudovogo Krasnogo Znameni institut
neftekhimicheskoy i gazovoy promyshlennosti im. akad. Gubkina
i Groznenskiy neftyanoy nauchno-issledovatel'skiy institut.

LITVINOV, V.M.

Deformation of packing rings. Mash. i nef't. obor. no.1:14-17 '65.
(MIRA 18:4)

1. Groznenskiy nef'tyanoy nauchno-issledovatel'skiy institut.

LEVINSON, V.M.

Investigation of the operation and wear of the backing of a
drill-pump piston. Neft. khoz. 41 no. 11:25-28 II '63.
(NORA 17:7)

LITVINOV, V.M.

Unit for testing packing. Mash. i neft. obr. no.5:7-9 '63.
(MIRA 17:8)

1. Groznenskiy neftyanoy nauchno-issledovatel'skiy institut.

L 00747-67 EWT(d)/EWT(m)/EWP(f)/T DJ

ACC NR: AP6005359

SOURCE CODE: UR/0413/66/000/001/0099/0099

45
B

AUTHOR: Litvinov, V. M.

ORG: none

TITLE: A stand for testing ²ⁿgaskets. Class 42, No. 177663

SOURCE: Izobreteniya, promyshlennyye obrasty, tovarnyye znaki, no. 1, 1966, 99

TOPIC TAGS: hydraulic equipment, hydraulic pressure amplifier, sealing device, test stand

ABSTRACT: This Author Certificate presents a stand for testing ^{11v}gaskets of reciprocating motion elements of hydraulic devices (for example, pistons of hydraulic pumps). The stand includes two sub-assemblies of gaskets positioned on a common rod and moving with a reciprocal motion in a cylinder. A liquid under pressure fills the space between the gaskets. The design permits the real conditions to be approximated by the test conditions with a reduced power consumption. A cylinder which is connected with the space between the gaskets is formed on the rod. A stationary plunger enters this cylinder. The space between the gaskets is connected with the inlet main and the delivery main through check valves (see Fig. 1). To obtain the required liquid operating pressure for the gasket being tested, the

Card 1/2

UDC: 620.165.29.762.424

L 00747-67

ACC NR: AP6005359

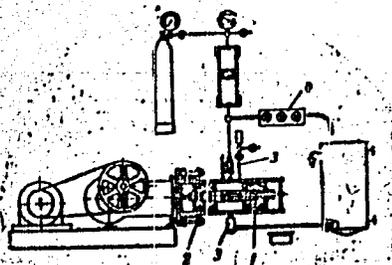


Fig. 1. 1 - rod;
2 - gasket; 3 - valves;
4 - throttle apparatus

delivery main is equipped with a variable throttle apparatus. Orig. art. has: 1 figure.

SUB CODE: 13, 14/

SUBM DATE: 11May62

Card *7/2/62*

USSR/Cultivated Plants - Fodders.

M-4

Abs Jour : Ref Zhur - Biol., No 7, 1958, 29860

Author : Litvinov, V.N.

Inst : The Gissar Institute for Animal Husbandry.

Title : The Corn Yield in Relation to the Feeding Bed.

Orig Pub : S. kh. Tadzhidistana, 1956, No 9, 38-41

Abstract : In an experiment of the Institute for Animal Husbandry in Gissarskiy Rayon of the Tadzhik SSR in raising corn in the presence of square-pocket planting the largest number of cobs on a single plant (2.1) was obtained when placed at 60 x 60 cm., the highest seed yield (in cobs at 102.7 centners per ha.) and green stuff output (181.7 centners per ha.) when planted at 45 x 45 cm.

Card 1/1

COUNTRY : USSR
CATEGORY : Cultivated Plants. Cereals. M
ABS. JOUR. : RZhBiol., No.14, 1958, No. 63355
AUTHOR : Pleshko, S. I., Litvinov, V. N.
INST. : Academy of Sciences, Tadzhik SSR
TITLE : Relation of Corn Yield to the Feeding area in Checkrow Planting.
ORIG. PUB. : Dokl. AN TadzhSSR, 1956, No. 18, 31-41
ABSTRACT : The trial was conducted in 1955 on Liming variety under the conditions of irrigation on the experimental field of the Institute of Animal Husbandry, Academy of Sciences Tadzhik SSR. With different feeding areas, no great difference was observed in the growth and development of the plants and in the formation and size of the ears. The highest yield of the ears was obtained with 45 x 45 cm spacing and leaving two plants in one hill. The smallest yield was obtained in 60 x 45 cm spacing.--G. Ch. Chernov

Card: 1/1

46

LITVINOV, V. N., Cand Agri Sci -- (diss) "Jerusalem Artichoke in the Gissarsk Depression of Tadzhik SSR," Stalinabad, 1959, 22 pp, 150 copies
(Department of Biological and Agricultural Sciences, AS Tadzhik SSR)
(KL, 46/60, 126)

GOL'DFARB, Ya.L.; LITVINOV, V.N.

Acylation of monoacylated thiophene homologs. Zhur.ob.khim. 30
no.8:2719-2726 Ag '60. (MIRA 13:8)

1. Institut organicheskoy khimii Akademii nauk SSSR.
(Thiophene) (Acylation)

PETROV, I.I., doktor tekhn.nauk, prof.; SYROMYATNIKOV, I.A., doktor tekhn. nauk, prof.; LITVINOV, V.N.; FROM, A.A.; GERSHKOVICH, S.F.; POPOV, S.N.; BOCHAROV, V.I.

In regard to the letter written by V.V.Artamonov, A.A.Fedorov, and M.I.Kiselev on "Improvement in the training of specialists in the field of electrification of industrial enterprises." Prom. energ. 15 no.9:55-59 S '60. (MIRA 13:10)

1. Nachal'nik elektrotsekh, g.Krasnoyarsk (for Litvinov). 2. Glavnyy energetik Kazgiprotsvetmet (for From). 3. Glavnyy energetik Novo-Kemerovskogo khimkombinata (for Gershkovich). 4. Sverdlovskiy sov-narkhoz (for Popov). 5. Frunzenskiy politekhnicheskiy institut (for Bocharov).

(Electricians--Education and training)
(Electrification)

(Artamonov, V.V.) (Fedorov, A.A.) (Kiselev, M.I.)

LITVINOV, V.N., inzh.

Operation of electrical systems in industrial enterprises. Prom.
energ. 19 no.3:18-20 Mr '64. (MIRA 17:4)

KOVAL', I.I., assistant; LITVINOV, V.N.

Administration of inhalation anesthesia during automatic artificial
respiration. Nov. khir. arkh. no.12:87-89 D '61. (MIPA 14:12)

1. Kafedra fakul'tetskoy khirurgii (zav. - prof. M.A. Kimbarovskiy)
Dnepropetrovskogo meditsinskogo instituta.
(ARTIFICIAL RESPIRATION)
(ANESTHESIOLOGY--APPARATUS AND INSTRUMENTS).

LITVINOV, V.N.

Late results of resecting appendices lacking acute inflammatory changes. Zdrav. Kazakh. 21 no.5:17-21 '61. (MIRA 15:2)

1. Iz kafedry gosspital'noy khirurgii (zav. - professor M.I. Bryakin) Kazakhskogo meditsinskogo instituta. (APPENDECTOMY)

LITVINOV, V.N.; KUZNETSOVA, A.A.

We are protecting mustard against pests. Zashch. rast. ot vred.
i bol. 2 no.6:48 N-D '57. (MIRA 16:1)

1. Predsedatel' kolkhoza Leninsk, Leninskogo rayona (for
Litvinov). 2. Zaveduyushchaya Leninskim punktom sluzhby ucheta
i prognozov (for Kuznetsova).

(Mustard--Diseases and pests)
(Spraying and dusting in agriculture)

SHUYKIN, N.I.; VIKTOROVA, Ye.A.; LITYINOV, V.P.

Contact catalytic conversions of phenols. Part 3: Alkylation of
m-cresol by amylenes. Vest. Mosk. un. Ser. mat., mekh., astron.,
fiz. khim. 12 no.5:121-124 '57. (MIRA 11:9)

1.Kafedra khimii nefi Moskovskogo gosudarstvennogo universiteta.
(Alkylation) (Cresol)

5.3600, 5.3610, 5.3620

77884

SOV/79-30-2-35/78

AUTHORS: Gol'dfarb, Ya. L., Litvinov, V. P., Shvedov, V. I.

TITLE: Comparative Acylation of Some Aromatic Systems

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 2,
pp 534-542 (USSR)

ABSTRACT: Acetylation of some aromatic systems of benzene and thiophene series, in the presence of stannic chloride was studied. The reactivity of individual products was determined in two-component mixtures of benzene and thiophene derivatives. The order of activity was found to be: 1,3-dimethoxybenzene > 2,5-dimethylthiophene > 2-methylthiophene > 2,5-diethylthiophene > thiophene > anisol > 2-bromothiophene > m-xylene > o- and p-xylenes > toluene > benzene. There are 3 tables; 28 references, 3 Soviet, 2 Swedish, 6 German 14 U.S., 3 U.K. The 5 most recent U.S. and U.K. references are:

Card 1/2

Comparative Acylation of Some
Aromatic Systems

77884

SCV/79-30-2-35/78

F. R. Jensen, H. C. Brown, J. Am. Chem. Soc., 80,
3039 (1958); V. J. Shiner, C. J. Vebranic, *ibid*, 79,
371 (1957); A. Burawoy, E. Spinner, J. Chem. Soc.,
1955, 2085; N. C. Brown, B. A. Bolto, F. R. Jensen,
J. Org. Chem., 23, 414 (1958); N. C. Brown, N. L. Young,
J. Org. Ch., 22, 719, 724 (1957).

SUBMITTED: February 9, 1959

Card 2/2

LITVINOV, V.P.; MOROZOV, V.A.

Infrared absorption spectra of mono- and diacylated thiophene homologues. Izv. AN SSSR. Otd. khim. nauk no. 1:166-168 Ja '61.
(MIRA 14:2)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
(Thiophene--Spectra)

GOL'DFARB, Ya.L.; LITVINOV, V.P.

Thiophthene series. Report No. 1: Searching for methods of synthesizing substituted compounds of thiophthene. Izv. AN SSSR. Otd. khim. nauk no. 2: 343-351 F '63. (MIRA 16:4)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR. (Thienothiophene)

GOL'DFARB, Ya.L.; LITVINOV, V.P.

Thiophthene series. Report No.2: Cyclization of esters of substituted (thienylmercapto)-acetic acids and some transformations of 2-ethylthiophthene. Izv.AN SSSR.Otd.khim.nauk no.2:352-359 F '63. (MIRA 16:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Acetic acid) (Thienothiophene)

GOL'DFARB, Ya.L.; LITVINOV, V.P.

Thiophthaps series. Report No.3: Cyclization of acetylmercapto-
thiophenes in the presence of aluminum chloride. Izv. AN SSSR.
Ser.khim. no.9:1621-1626 S '63. (MIRA 16:9)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Thienothiophene) (Thiophene) (Cyclization)

GOL'DFARB, Ya.L.; LITVINOV, V.P.; PETRUKHOV, V.A.; YAKOVLEV, I.P.

Thiophthene series. Report No.4: Quantitative composition of the product obtained by the cyclization of 5-ethyl-2-acetylmercaptothiophene in the presence of aluminum chloride. Izv. AN SSSR. Ser.khim. no.9:1627-1631 S '63.
(MIRA 16:9)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Thienothiophene) (Thiophene) (Cyclization)

LITVINOV, V.P.; GOL'DFARB, Ya.L.

Thiophthene series. Part 5: Some transformations of isomeric
thiophthenes. Izv. AN SSSR. Ser. khim. no.12:2183-2192
D '63. (MIRA 17:1)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

GOL'DFARB, Ya.L.; LITVINOV, V.P.

Synthesis of some selenides and sulfides of the thiophene and
furan series. Izv. AN SSSR Ser. khim no.11:2088-2089 N '64
(MIRA 18:1)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

MART'YANOV, S.N., dotsent; LITVINOV, V.P., veterinarnyy vrach-rentgenolog

Removal of a foreign body from the bifurcation of the trachea.
Veterinariia 41 no.9:77 S '64. (MIRA 13:4)

1. Moskovskiy tekhnologicheskiy institut myasnoy i molochnoy
promyshlennosti.

GOL'DFARB, Ya.L.; LITVINOV, V.P.; OZOLIN', S.A.

Thiophthene series. Report No.6: Cyclization of 3-acetonyl-
mercaptothiophenes in the presence of aluminum chloride. Izv.
AN SSSR. Ser. khim. no.3:510-515 '65. (MIRA 18:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

LITVINOV, V.P.; MALYUTIN, S.V., tekhnik.

Changing the SMT-34 telephone apparatus over to new types of tubes.
Vest.sviazi 17 no.2:6-8 F '57. (MIRA 10:3)

1. Starshiy inzhener Tsentral'noy mezhdugorodnoy telefonnoy stantsii
(for Litvinov). 2. Tsentral'naya mezhdugorodnaya telefonnaya stantsiya
(for Malyutin)

(Telephone--Apparatus and supplies)

ARSIRIY, Yu.A.; BLANK, M.I.; BLIZNYUK, V.F.; GLUSHKO, V.V.;
KLITICHENKO, I.P.; LITVINOV, V.R.; PALIY, A.M.; PAN'KIV, A.M.;
PISTRAK, R.M.; CERPAK, S.Ye.; CHIRVINSKAYA, M.V.; YARCHENKO, L.M.

Plan for the areal study of the Dnieper-Donets Lowland. Trudy
VNIIGAZ no.14:3-17 '62. (MIRA 15:5)

(Dnieper-Donets Lowland---Petroleum geology)
(Dnieper-Donets Lowland---Gas, Natural---Geology)

VASIL'YEV, V.G.; VOROB'YEV, E.S.; DUDKO, N.A.; ZIL'BERMAN, V.I.; KLITCOHENKO,
I.F.; LITVINOV, V.R.; TKHORZHEVSKIY, S.A.; CHERPAK, S.I.

Present status of and prospects for the development of the pro-
duction of natural gas in the eastern Ukrainian oil- and gas-
bearing region. Gaz. prom. 10 no.4:1-6 '65.

(MIRA 18:5)

L 9921-63
ACCESSION NR: AP3001051 EWP(g)/EWT(m)/BDS--AFFTC/ASD--JD/RW-2
S/0148/63/000/004/0104/0108

59
58

AUTHOR: Litvinov, V. S.; Mints, R. I.

TITLE: Strain hardening of austenitic manganese and nickel alloys

SOURCE: IVUZ. Chernaya metallurgiya, no. 4, 1963, 104-108

TOPIC TAGS: strain hardening, manganese austenitic steels, nickel austenitic steels, static loads, dynamic loads, microimpact

TEXT: A study has been made of the strain-hardening behavior of two low-carbon austenitic steels, G38 (0.03% C, 38.0% Mn) and N36 (0.05% C, 34.7% Ni), under static and dynamic loads. The static loads were applied by a standard tensile test or (locally) by pressing a 5.5-mm-diameter ball to a depth of 2.5 mm. A local dynamic load was applied by dropping a 20-kg weight onto the same ball from a height of 0.5 m. A rapid-impact load was applied by firing a pin at a velocity of 790 to 800 m/sec, sufficient to pierce the specimen. For the microimpact test, a hydraulic-erosion

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L 9979-63

ACCESSION NR: AP3001051

machine was used, with a water pressure of 0.23 atm. Under all types of loads, G38 showed greater strain hardening. In the static tensile test, necking down and fracture occurred in N36 at elongation of 25% and 36%, respectively, and in G38, at 31% and 39%. Local loading increased the hardness of G38 by as much as 170 H sub B (static) and 210 H sub B (dynamic); for N36 the respective figures were 95 and 100 H sub B.

Locally loaded specimens of G38 were strain hardened through the entire thickness, but those of N36, only to a depth of 3 to 3.5 mm. Local loads produced maximum strain hardening precisely at the surface. In the case of rapid-impact loading, the increase in hardness in the immediate vicinity of the pierced hole was 250 H sub B in the case of G38 and 100 H sub B for N36. Although, under conditions of microimpact, these steels are not erosion resistant, considerable strengthening takes place, more intensively in G38 than in N36, the difference being greater at the surface. Metallographic examination of N36 specimens after microimpact revealed a displacement of individual grains, viscous intragranular microflow near the grain boundaries, and wavy traces of plastic deformation, whereas in G38 the deformation was not localized in the boundary zones, being more uniform, as indicated by straight slip lines. It is concluded that the difference in the strain-hardening behavior of these steels cannot be

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L 9979-63

ACCESSION NR: AP3001051

explained solely on the basis of phase transformations under the effect of plastic deformation, but rather by the intrinsic qualities of the solid solution, i.e., the type of alloying. Orig. art. has: 6 figures.

ASSOCIATION: Ural'skiy politekhnicheskii institut (Ural Polytechnic Institute)

SUBMITTED: 08Jun62 DATE ACQ: 11Jun63 ENCL: 00
SUB CODE: 00 NO REF SOV: 001 OTHER: 002

ph/194
Card 3/3

LITVINOV, V.B.; KLEPENIN, V.V.; POLOCH, A.L.; SETRONYUK, E.S.; PANKOV, F.F.

Izlyakovskoye, a new large oil field. Noft. i gaz. prom. 11.110-3
No. 165. (NIRA 19:3)

BOGACHEV, I.N.; LITVINOV, V.S.; MINTS, R.I.

Characteristics of the plastic deformation of austenitic manganese
and nickel alloys. Fiz. met. i metalloved. 16 no.4:596-602 0
'63. (MIRA 16:12)

1. Ural'skiy politekhnicheskii institut imeni S.M.Kirova.

ACCESSION NR: AP4029006

S/0126/64/017/003/0467/0468

AUTHOR: Litvinov, V. S.; Mirzoyev, D. A.; Shklyar, R. S.

TITLE: Study of some defects of the crystalline structure of nickel and manganese austenite alloys

SOURCE: Fizika metallov i metallovedeniye, vol. 17, no. 3, 1964, 467-468

TOPIC TAGS: crystalline structure, austenite based alloy, nickel containing alloy, manganese containing alloy, N36 austenite alloy, G38 austenite alloy

ABSTRACT: In their previous work, the authors have shown that it is impossible to explain the distinct hardness of nickel and manganese austenite alloys only by the characteristics of the phase conversion which occur in them during the plastic deformation process. This paper confirms the earlier conclusion made by the authors that the behavior of these alloys during the deformation process is determined by the very nature of the solid solution. The purpose of this paper is to determine the existence of some relation between the concentration of defects in the packing of the metal and the size of the billets as well as the extent of micro-distortions, which are actually one of the basic factors determining the strength of metals. A special x-ray instrument, URS-50I, was used in the experiments. The results of the

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ACCESSION NR: AP4029006

investigation are presented in a table. A higher probability of packing defects is observed in manganese alloy. With a decrease of deformation temperature the probability of defects increases, it increases more intensely in manganese alloys. Two austenite alloys are studied, G38 and N36. The small probability of packing defects in nickel austenite attest to the high energy of their formation which stipulates a greater mobility of dislocation and consequently less intense hardening of austenite in plastic deformation. The high energy of packing defects obviously is one of the basic causes of the low tendencies of nickel austenite to hardening. Orig. art. has: 1 table

ASSOCIATION: Ural'skiy politekhnicheskii institut im. S.M. Kirova (Ural Polytechnical Institute)

SUBMITTED: 02Jly63

DATE ACQ: 27Apr64

ENCL: 00

SUB CODE: ML

NO REF SOV: 004

OTHER: 001

Card 2/2

LITVINOV, V.S.

TREMBACH, V.V., assist.; ~~LITVINOV, V.S.~~ student.

Designing mirror lamps. Trudy MNI no.13:66-75 '53. (MIRA 11:4)

1. Moskovskiy energeticheskiy institut im. V.M. Molotova, Kafedra svetotekhniki.

(Electric lighting)

TREMBACH, V.V., kand.tekhn.nauk; LITVINOV, V.S., inzh.

Broad-radiation reflector fixture for high-pressure mercury
lamps. Svetotekhnika 5 no.9:17-22 S '59. (MIRA 13:2)

1. Moskovskiy energeticheskiy institut.
(Electric lighting, Mercury vapor)

LITVINOV, Vasilii Semenovich; KHEYFITS, M.E., inzh., red.; BASHILOV,
V.I., red.; LEBEDEVA, L.V., tekhn.red.

[Electric power supply to the construction operations of the
Kakhovka Hydroelectric Power Station] Elektrosnabzhenie
stroitel'stva Kakhovskoi gidroelektrostantsii. Moskva, Orgenergo-
stroi, 1960. 57 p. (MIRA 14:2)
(Kakhovka Hydroelectric Power Station)
(Electricity in building)

ROKHLIN, G.N., kand.tekhn.nauk; LITVINOV, V.S., inzh.; TROITSKIY, A.M.

Concerning the operation of fluorescent lamps on higher frequencies.
Svetotekhnika 6 no.8:8-14 Ag '60. (MIRA 13:11)
(Fluorescent lamps)

LITVINOV, V.S., inzh.

Choice of an optimum circuit for switching on fluorescent lamps.
Svetotekhnika 6 no.11:23 N '60. (MIRA 13:11)
(Fluorescent lamps)

LITVINOV, V.S., inzh.

Concerning efficient circuits for connecting a wide range of
fluorescent lamps. Svetotekhnika 7 no.5:29+30 My '61. (MIRA 14:6)

(Fluorescent lighting)

S/196/61/000/009/010/052
E194/E155

AUTHORS: Litvinov, V.S., Troitskiy, A.M., and
Kholopov, G.K.

TITLE: Characteristics of Soviet fluorescent lamps when
operated at high frequencies

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika,
no.9, 1961, 8, abstract 9V 59. (Svetotekhnika, no.1,
1961, 5-10).

TEXT: As the supply frequency is raised the electrical
characteristics of lamps having different types of ballast approach
one another and are practically indistinguishable above a
frequency of 800 - 1000 c/s. This greatly simplifies the
development of economic starting and controlling equipment.
With increasing frequency the improved wave shapes of current and
voltage should lengthen the lamp life. The increase in light
output of a lamp with increasing frequency is attributed both to
reduction of losses in the anode-cathode region (up to 800 c/s)
and to alteration of the discharge properties (reduction of the
power loss in the discharge tube). The relationship between the
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Characteristics of Soviet ...

S/196/61/000/009/010/052
E194/E155

light output of lamps and the supply frequency shows that the tube diameter influences the relative change in output of resonance lines. This indicates the need to study the electrical-kinetic characteristics of the discharge over the length and diameter of the tube. Study of the properties and parameters of discharge by probes will help to indicate methods of developing light sources which have greater high-frequency efficiency than have standard fluorescent lamps. Because of possible improvements in lamp life with higher frequency there is a need to carry out large-scale life tests of lamps and to develop methods of accelerating the assessment of lamp life under various operating conditions. As the light and power characteristics of fluorescent lamps display no tendency to saturation with rise in frequency to 10 kc/s, similar tests should be made at still higher frequencies. 13 illustrations, 13 literature references.

[Abstractor's note: Complete translation.]

Card 2/2

Moskovskiy energeticheskiy inst. Tut

LITVINOV, V.S., inzh.

System for physical modeling of mirror lamps. Svetotekhnika 7
no.7:11-15 JI '61. (MIRA 14:8)

1. Moskovskiy energeticheskiy institut.
(Electric lighting--Models)

LITVINOV, V.S., inzh.

Unified engineering method for designing incandescent lamps.
Svetotekhnika 7 no.10:3-8 0 '61. (MIRA 14:9)

1. Moskovskiy energeticheskiy institut.
(Electric lamps, Incandescent)

MARSHAK, Immanuel' Samoylovich; LITVINOV, V.S., red.; LARIONOV,
G.Ye., tekhn. red.

[Pulsed light sources] Impul'snye istochniki.sveta. Mo-
skva, Gosenergoizdat, 1963. 335 p. (MIRA 17:3)

OSKOLKOV, I. M., kand. tekhn. nauk; TIMOFEYEV, G. I., inzh.;
LITVINOV, V. S., inzh.; TROITSKIY, A. M.

Review of the chapter titled "Brightness control of fluorescent lamps" of K. G. Shturm's book "Start regulating equipment and networks for connecting fluorescent lamps." Svetotekhnika 9 no.2:29-30 F '63. (MIRA 16:4)

1. Nauchno-issledovatel'skiy kinofotoinstitut (for Oskolkov, Timofeyev).

(Fluorescent lamps) (Fluorescent lighting)
(Shturm, K. G.)

ALIKHANIDI, A.G., inzh.; KRASNOPOL'SKIY, A.Ye., kand. tekhn. nauk;
LITVINOV, V.S., kand. tekhn. nauk

Choice of networks for connecting fluorescent lamps.
Svetotekhnika 9 no.9:22-24 S '63. (MIRA 16:10)

1. Moskovskiy elektrolampovyy zavod i Moskovskiy energeticheskiy
institut.

LITVINOV, V.S., kand. tekhn. nauk; TROITSKIY, A.M., inzh.

Effectiveness of high-frequency fluorescent lighting. Svetotekhnika
9 no.11:1-9 N. '63. (MIRA 16:12)

1. Moskovskiy energeticheskiy institut.

L 22900-65 EPF(n)-2/EPA(s)-2/EWT(m)/EPA(bb)-2/EWP(b)/EDA(d)/EWP(1)/EWP(t)
Pt-10/Pu-4/Pad IJP(c) WW/MJW/JD/HW/JG/WB S/0126/64/018/005/0752/0757
ACCESSION NR: AP5001245

AUTHOR: Bogachev, I.N.; Litvinov, V.S.; Mints, R.L.; Nesterov, N.V.

TITLE: Some regularities in the destruction of metal surfaces subjected to the action of cavitation in molten lead

SOURCE: Fizika metallov i metallovedeniye, v. 18, no. 5, 1964, 752-757

TOPIC TAGS: cavitation, ultrasound, molten lead, nickel corrosion, copper corrosion, austenitic steel corrosion, cavitation erosion/steel 1Kh18N9T, steel 1Kh13

ABSTRACT: The erosion of surfaces of nickel, copper, austenitic alloys of iron with nickel and manganese, and steels 1Kh18N9T and 1Kh13, acted upon by cavitation in molten lead, was investigated by means of photomicrographs and by measuring the micro-hardness and hardening of the surfaces. A dynamic contact between the metals and alloys and the lead was achieved by using ultrasound. It was shown that the same laws govern cavitation erosion in liquid lead and in water. Surface attack, which is primarily mechanical in character, is localized in isolated microvolumes of the surface. A relationship was observed between the hardening of the metal during the cavitation

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L 22900-65

ACCESSION NR: AP5001245

Influence in the melt and its strength. It is concluded that pronounced anticorrosive properties of a material cannot be used as a criterion of its resistance to cavitation in water or in melts. Orig. art. has: 5 figures.

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S. M. Kirova (Ural'sk poly-technical institute)

SUBMITTED: 27May64

ENCL: 00

SUB CODE: MM -

NO REF SOV: 007

OTHER: 002

Card 2/2

L 32973-66 EWT(m)/EWP(k)/T/EWP(t)/ETI IJP(c) JD/HW/WB

ACC NR: AP6017519

(N)

SOURCE CODE: UR/0148/66/000/001/0132/0135

AUTHOR: Veksler, Yu. G.; Litvinov, V. S.; Mints, R. I.

59
55
6

ORG: Ural Polytechnic Institute (Ural'skiy politekhnicheskiy institut)

TITLE: Stability and strengthening on nickel base alloys under exposure to micro-cavitation

SOURCE: IVUZ. Chernaya metallurgiya, no. 1, 1966, 132-135

TOPIC TAGS: nickel alloy, precipitation hardening, cavitation, hardness variation, metallographic examination

ABSTRACT: The industrial alloys EI437 and EI867 (both of which are hardening nickel base alloys) were subjected to microcavitation in an impact-erosion apparatus and subsequently tested for surface hardness and weight loss. The aging characteristics of the alloys before and after exposure are given. Surface hardnesses were given as a function of testing time for different aging conditions--as-quenched and aged for 8, 25, and 50 hrs. In all cases, the plastic deformation induced by microcavitation resulted in strain hardening; maximum hardness was achieved after 3 to 4 hrs of testing. The alloy EI867 achieved the highest hardness for all relative conditions and the highest rate of strain hardening (55 to 65%) in the as-quenched condition. Sample destruction set in after about 5 to 7 hrs of testing and after the weight losses became considerable.

UDC: 669.24:620.186.5

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L 32973-66

ACC NR: AP6017519

able (16 to 18 hrs). The weight losses for the aged nickel alloys were much lower than those for N36 and 1Kh18N9T. The stability under microcavitation was measured by the parameter $1/\Delta P_{sr}$, where ΔP_{sr} was the average weight loss (g/cm^2). The stability of EI867 was twice that of EI437 for testing times up to 50 hrs. At about 25 hrs both stability curves reached a maximum. A metallographic examination was done at various stages of cavitation damage and micrographs of plastic deformation by compression and microcavitation were compared. Surface pitting and scaling were observed in the initial stages of exposure and the amount increased with time. Slip markings were widely scattered for microcavitation deformation when compared with the uniform slip traces observed in compression. The general kinetics and characteristics of microcavitation damage were very similar to Fe-Ni and Cr-Ni alloys. Alloying and strengthening by aging the nickel base alloys served only to prolong the incubation period, after which the destruction of the alloy proceeded very rapidly. One of the primary factors determining microcavitation stability was the nature of the solid solution itself. Orig. art. has: 5 figures, 1 table.

SUB CODE: 11/ SUBM DATE: 03May63/ ORIG REF: 002

Card 2/2

PHASE I BOOK EXPLOITATION

SOV/3808

Litvinov, Vladimir Trofimovich

Peredovyye sposoby frezerovaniya (Advanced Milling Methods) Stalino, Knizhnoye izd-vo, 1959. 16 p. (Series: Novaya tekhnika semiletki) 2,500 copies printed.

Ed.: Ye. Terekov; Tech. Ed.: A. Samoletova.

PURPOSE: This brochure is intended for milling machine operators and might be of interest to machine-tool workers in general.

COVERAGE: The author, an outstanding milling machine operator, tells about his working experience at the Novo-Kramatorskiy mashinostroitel'nyy zavod imeni Stalina (New Kramatorsk Machine Building Plant imeni Stalin). The way he carries out his assignment within the Seven-Year Plan constitutes the subject matter of this booklet. The author relates how, by constantly looking for new methods of production and by taking a thoughtful and creative approach to the various problems encountered in his work, he was able to lower the cost of processing, increase work efficiency, and save time spent on unproductive work and overhead. The foreword to this brochure was written by V. Sakhno, head of the technical department of Mechanical Shop No. 7 of the Plant. There are no references.

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Advanced Milling Methods

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